Applicant: Mark Madden et al. Attorney's Docket No.: 09010-113001

Serial No.: 09/751,299

Filed: December 28, 2000

Page : 2

AMENDMENT

Please amend the above-captioned application as follows:

In The Specification:

Please replace the pending title with the following new title:

--METHODS FOR PRODUCING ALPHA-SUBSTITUTED CARBOXYLIC ACIDS--

In The Claims:

Please add the following new claims:

Claim 31 (NEW) A method for producing an alpha-substituted carboxylic acid, the method comprising

- (a) providing an aldehyde or a ketone;
- (b) providing a cyanide-containing compound;
- (c) providing an ammonia-containing compound or a compound comprising an ammonium salt or an amine;
 - (d) providing a nitrilase or a polypeptide having nitrilase acitivity;
- (e) contacting the aldehyde or ketone of step (a) with a cyanide-containing compound of step (c) and an ammonia-containing compound or a compound comprising an ammonium salt or an amine of step (d) such that an amino nitrile or a cyanohydrin intermediate is produced; and
- (f) contacting the amino nitrile or cyanohydrin intermediate of step (e) with the nitrilase or polypeptide having nitrilase activity of step (e) such that the nitrilase or polypeptide hydrolyzes the amino nitrile or cyanohydrin intermediate to produce an alpha-substituted carboxylic acid.

Claim 32 (NEW) A method for producing an alpha-substituted carboxylic acid, the method comprising

- (a) providing a composition comprising an amino nitrile or a cyanohydrin;
- (b) providing a nitrilase or a polypeptide having nitrilase activity; and
- (c) contacting the amino nitrile or cyanohydrin intermediate of step (a) with the nitrilase or polypeptide having nitrilase activity of step (b) such that the nitrilase or polypeptide

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